



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,933	09/09/2003	Sunny E.L. Huang	7342	1592
7590	01/19/2005			
Paul M. Denk Ste. 170 763 S. New Ballas Road St. Louis, MO 63141			EXAMINER REIS, TRAVIS M	
			ART UNIT 2859	PAPER NUMBER

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/657,933

Applicant(s)

HUANG, SUNNY E.L.

Examiner

Travis M Reis

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-14, 16, 17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 16, 17 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "wiring, extending from said illuminating means proximate to said base member and connecting to an external electrical source" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1 & 11 are objected to because of the following informalities:

There is no structural relationship between the electrical energy source in claims 1 &

Art Unit: 2859

11 and any other structure of the invention.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Campbell (U.S. Patent 4197807).

Campbell discloses a method of cautioning motorists,, the steps comprising attaching a spiral structure (3) to a base member (1); releasing said structure to assume the natural configuration of said structure (Figure 1); illuminating said structure by reflective coloring (12); contracting said structure upon said base member after usage of said structure (Figure 3); and fastening (6,7) said structure to (via 5) said base member (Figure 2).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

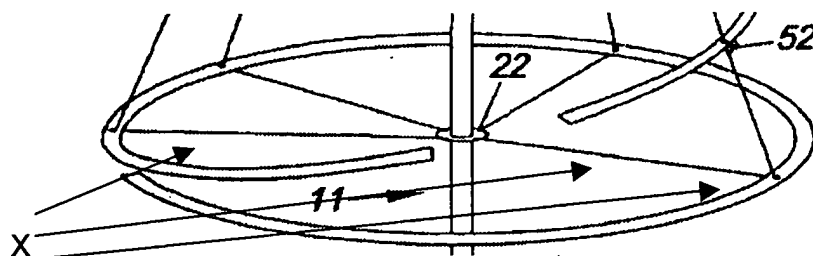
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips (U.S. Patent 6048590) in view of Ybanez (U.S. Patent 2275711) & Rahman (Des. 421810).

With reference to claims 1, 2, & 10, Phillips discloses a resiliently expandable structure (10) in the shape of a cone comprising a structure (13), having an inherent spiral

Art Unit: 2859

configuration formed of a band of resilient polymer material (Abstract); a base member (22) having a span (X, see below)



greater than the largest diameter of said structure and joining said structure at one or more points; a cross brace (21) having a span of the narrowest diameter of said structure, joining said structure at multiple points, and located opposite said base member (Figure 1); and illuminating means (54), regularly arrayed along the length of said band (Figures 1-3).

Phillips does not disclose a fastening means having a metal strap, one end contacting said cross brace with an opposite free end.

Ybanez discloses a safety signal with a strap (29) having one end (31) free (Figures 1 & 2) (wherein it is broadly considered that "one end contacting said cross brace" consists of the half of the strap which is not free). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the strap disclosed by Ybanez to the structure disclosed by Phillips in order to more directly secure the structure in collapsed configuration and prevent accidental expansion.

Phillips does not explicitly disclose said illuminating means to connect said structure to an external energy source.

Rahman discloses a flat to spiral light set with light wired along the spiral and capable of being plugged into an external energy source (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add a plug as disclosed by Rahman to the lights disclosed by Phillips in order that they could illuminate.

Art Unit: 2859

With reference to claim 3, Phillips does not disclose the structure has a generally cylindrical shape. However, the shape of the structure, absent any criticality, are only considered to be obvious modifications of the shape of structure disclosed by Phillip as the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by Applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 ( CCPA 1976 ). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to shape the structure disclosed by Phillip in a cylinder in order to decorate for other occasions.

With respect to the preamble of the claims 1-3 & 10: the preamble of the claim does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self – contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 ( CCPA 1951).

7. Claims 7 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips, Ybanez, & Rahman as applied to claims 1-3 & 10 above, and further in view of Shu (U.S. Patent 6109764).

Phillips, Ybanez, & Rahman disclose all of the instant claimed invention as stated above in the rejection of claims 1-3 & 10, but do not disclose the illumination means are light emitting diodes.

Shu discloses LED lamps for decorative lamp strings (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the lights disclosed by Phillips, Ybanez, & Rahman with the LED lamp string

disclosed by Shu in order to be more energy efficient.

8. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips, Ybanez, & Rahman as applied to claims 1-3 & 10 above, and further in view of Headley (U.S. Patent 6164304).

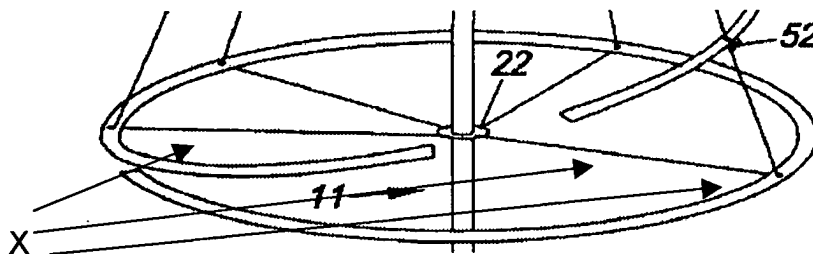
Phillips, Ybanez, & Rahman disclose all of the instant claimed invention as stated above in the rejection of claims 1-3 & 10 but do not disclose a strap of sufficient length to span at least twice the diameter of said structure with cooperating hook and pile fasteners with one segment of said hook and pile fasteners located at the fixed end of said strap and a second segment of said hook and pile located at the free end of said strap, whereby said strap extends from said cross brace, wraps the diameter of said structure when contracted, returns to said cross brace, and said second segment secures to said first segment.

Headley discloses an umbrella (10) with a strap (28) of sufficient length to span at least twice the diameter of said structure when collapsed (Figure 3) with cooperating hook and pile fasteners (60a, 60b) with one segment of said hook and pile fasteners located at the fixed end of said strap and a second segment of said hook and pile located at the free end of said strap, whereby said strap extends from an end segment (26), wraps the diameter of said structure when contracted, returns to said end segment, and said second segment secures to said first segment (Figure 3). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the strap disclosed by Phillip, Ybanez, & Rahman with the strap disposed on the end segment disclosed by Headley (made of metal as taught by Barnard, Ybanez, & Rahman), said strap having the hook and pile fasteners disclosed by Headley in order to better secure the collapsed structure closed.

9. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Rahman & Campbell.

Art Unit: 2859

With reference to claims 11 & 12, Phillips discloses a resiliently expandable structure (10) in the shape of a cone comprising a structure (13), having an inherent spiral configuration formed of a band of resilient polymer material (Abstract); a base member (22) having a span (X, see below)



greater than the largest diameter of said structure and joining said structure at one or more points; a cross brace (21) having a span of the narrowest diameter of said structure, joining said structure at multiple points, and located opposite said base member (Figure 1); and illuminating means (54), regularly arrayed along the length of said band (Figures 1-3).

Phillips does not disclose a generally centered fitting and a button cooperating together to releasably secure said structure in a contracted position.

Campbell discloses a collapsible traffic cone marker with a button (6) and fitting (5) on opposite sides of a structure (3) which cooperate together to releasably secure said structure in a flat compact position (Figures 1-3). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the button and fitting disclosed by Campbell in order to keep the structure in a compacted position when not in use.

Phillips does not explicitly disclose said illuminating means to connect said structure to an external energy source.

Rahman discloses a flat to spiral light set with light wired along the spiral and capable of being plugged into an internal source (Figure 1). Therefore, it would have been obvious to



Art Unit: 2859

one with ordinary skill in the art at the time of the invention was made to add a plug as disclosed by Rahman to the lights disclosed by Phillips in order that they could illuminate.

With reference to claim 13, Phillips does not disclose the structure has a generally cylindrical shape. However, the shape of the structure, absent any criticality, are only considered to be obvious modifications of the shape of structure disclosed by Phillip as the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by Applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 ( CCPA 1976 ). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to shape the structure disclosed by Phillip in a cylinder in order to decorate for other occasions.

With respect to the preamble of the claims 11-13: the preamble of the claim does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self – contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 ( CCPA 1951).

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips, Rahman, & Campbell, as applied to claims 11-13, and further in view of Say (U.S. Patent 5335622).

Phillips, Rahman, & Campbell disclose all of the instant claimed invention as stated above in the rejection of claims 11-13 but do not disclose said fitting has internal threading that cooperates with external threading of said button.

Say discloses an indicator cap embodiment (24) in Figures 3 & 4, external thread/lugs

Art Unit: 2859

(70) threadably engage the internal thread/lugs (73) in order to sealingly engage the cap to the housing (230) (col. 7 lines 16-25) (Figures 3 & 4). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the threadings on the fitting and the button disclosed by Phillips, Rahman, & Campbell, with the external thread/lugs and internal thread/lugs disclosed by Say since these are alternate forms of threading and to sealingly engage the button to the fitting.

11. Claims 16 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips, Rahman, & Campbell, as applied to claims 11-13 & 16, and further in view of Shu.

Phillips, Rahman, & Campbell disclose all of the instant claimed invention as stated above in the rejection of claims 11-13 but do not disclose light emitting diodes.

Shu discloses LED lamps for decorative lamp strings (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the lights disclosed by Phillips, Rahman, and Campbell with the LED lamp string disclosed by Shu in order to be more energy efficient.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

13. With reference to claim 19, in response to applicant's arguments that Campbell is unlike applicant's invention since Campbell uses a central rod and the applicant's invention does not; these arguments have been fully considered but they are not persuasive since the centered rod closed by a wing nut meets the limitations of the claim of a threaded fitting, as detailed above in paragraph 5. Although the claims are interpreted in light of the specification and the terms contained therein, limitations from the specification are not read into the claims, as the Examiner must take the broadest reasonable interpretation of the language of

Art Unit: 2859

the claims consistent with the specification when interpreting the claims.

14. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a strap attached to the cross brace generally in the center of the invention) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

15. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### **Conclusion**

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Travis M Reis  
Examiner  
Art Unit 2859



Diego Gutierrez  
Supervisory Patent Examiner  
Technology Center 2800

tmr  
January 10, 2005

**CHRISTOPHER W. FULTON**  
**PRIMARY EXAMINER**